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ABSTRACT

A discussion of the role of sociolinguistics in the treatment of communication disorders focuses on issues related to dialect and language variation. It begins with an examination of linguistic diversity and dynamic description of language, reporting on a study of speech and language pathologists' judgments of sentences in African American Vernacular English. The sociolinguistic model of systematic variation within a single language is outlined, and related research is reviewed. Three trends in the field of communication disorders that reflect an underlying sociolinguistic perspective are examined: (1) concern over remediation models that fragment language behaviors in a way that does not reflect real language usage; (2) focus on language function rather than form; and (3) concern for generalization of therapy-based learning to real-world usage. A rationale for sociolinguistic education for specialists in communication disorders is presented. An experimental curriculum in exploring language variation and dialects, designed for grades 4 and 5, is then described. (Contains 84 references.) (MSE)

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THE SOCIOLINGUISTIC MODEL IN SPEECH AND LANGUAGE PATHOLOGY

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Introduction

At first glance, the application of linguistic and sociolinguistic models within the field of communication disorders seems to offer a rather exhilarating example of cross-disciplinary fertilization. A cursory overview of literature in speech and language pathology reveals an appeal to paradigms ranging from current versions of rationalistically-based, abstract syntactic theory (Leonard 1988) to a full complement of empirically-based sociolinguistic approaches (e.g. Taylor 1986a; Cole and Deal forthcoming). This apparent insemination of linguistic and sociolinguistic knowledge seems remarkable in light of the historical and philosophical traditions that gave birth to the respective disciplines of speech and language pathology and linguistics. By tradition and by philosophical orientation, speech and language pathology is a field defined by its primary service orientation, with an historical intellectual heritage molded through its early development within behavioral psychology (Wolfram 1978). The research tradition within the field still heavily reflects this initial orientation, particularly with its respect to the definition, analysis, and interpretation of "data". Furthermore, focus on language norms that serve as a baseline for diagnosing and remediating disorder has always served as the applied venue for its activities.

On the other hand, linguistics and sociolinguistics developed in a context where description was primary. The preoccupation with description, which later developed into a search for explanation, has defined both its theoretical and its applied foci, including its definition of data, its analytical methodology, and its argumentation for theoretical model construction. And although much of modern linguistic theory is now more properly considered a kind of cognitive psychology than a behavioral science, many of its sociolinguistic tenets are still embedded in the early 20th century relativistic roots of cultural anthropology.

It has now been over two decades since sociolinguistics initially confronted speech and language pathology through the so-called "difference-deficit controversy" about language variation (Baratz 1968; Taylor 1969; Dittmar 1976). During the intervening years, we have seen perspectives within the field explicitly shift from a fundamental confusion between a language disorder and a legitimate socioculturally-based language difference to institutional positions that mandate that clinicians NOT treat sociolinguistic differences as disorders (ASHA 1983).[1] In the process, important descriptive sociolinguistic information on inter-language (e.g. Erickson and Omark 1981; Erickson and Iglesias 1986) and intra-language variation (e.g. Williams and Wolfram 1976; Cole and Deal forthcoming) has been compiled for practical application in the field of communication disorders and professional speech and

language pathologists are now strongly encouraged to acquire sociolinguistic background information as a basis for serving diverse populations. There is now ample discussion of the implications of sociolinguistic differences on the diagnosis and remediation of linguistically-diverse populations (e.g. Vaughn-Cooke 1983; Terrell 1983) and the clinical management of communicatively-handicapped minority language populations (Taylor 1986b; Cole and Deal forthcoming). On the surface, then, it would seem that a sociolinguistic model has now become firmly entrenched within the field of communicatior. disorders.

While various dimensions of a sociolinguistic paradigm certainly have been proposed and operationalized within speech and language pathology, there are also dimensions of this model that remain more ideal than real. In part, this is due to the inevitable time lag between precept and practice that is exaggerated in professions that are dichotomized into "research" and "clinical" tracks. However, part of the discrepancy derives from the inherent artificiality of distinctions such as "theory" and "application" and "researchers" and "practitioners".

In the following sections, I propose to give a candid appraisal of the uses of the so-called sociolinguistic model in the field of communication disorders, focussing on issues of intra-language variation rather than multilingualism. In some ways, the subtleties of intra-language variation are actually more elusive than the more transparent case of multilingualism, although many underlying issues apply to both types of situations. In this respect, the focus of this critique is aligned more with social dialectology than it is with the sociology of language.

Dynamic Description and Linguistic Diversity

A sociolinguistic model in communication disorders is initially premised on a rather primitive assumption about language norms, namely, that norms of linguistic well-formedness are ultimately to be defined on the basis of a client's local speech community.[2] In other words, it is the language structures of the indigenous speech community that are to be used as a reference point for judgments of grammaticality and pragmaticality. Social dialectologists have fought hard and long for a definition of language "normalcy" that stands apart from socially-based, prescriptive judgments of acceptability, and they at least have succeeded in getting the profession to pay lip service to this ideal (see, for example, ASHA's position paper on social dialects 1983). This perspective is be relatively straightforward, but not without significant implications for assessment and remediation.

There is little doubt that the vernacular dialect profiles offered by social dialectologists over the past couple of decades (e.g. Williams and Wolfram 1976;

Hughes and Trudgill 1980; Trudgill 1983; Edwards 1990) provide important baseline data on normal vernacular linguistic structures. In fact, some standardized testing instruments now routinely include such descriptive overviews for reference in evaluating the responses of dialectally diverse speakers (e.g. CELF-R 1987). Certainly, such accounts have provided an important descriptive base for many speech and language pathologists who wish to judge the linguistic well-formedness of sociolinguistically diverse clients in an equitable way.

Baseline descriptive knowledge of relevant dialectal structures for a given speech community is, of course, a prerequisite in order to avoid false positive and false negative diagnosis of clients from vernacular dialect backgrounds. Imposing strict prescriptive, external language standards leads to judgments of speakers that may falsely attribute a dialect difference to disorder, whereas imposing lax standards not in compliance with local norms may lead to the assignment of false credit for structures that may be ill-formed in terms of the vernacular dialect itself.

To determine if the dialectological ideal is, in fact, being applied by speech and language pathologists, I recently conducted a survey of speech and language pathologists' knowledge about vernacular dialect well-formedness. In this survey, I asked a group of clinicians in a Northern metropolitan area of the United States to determine whether or not a set of sentences in a vernacular variety was well-formed or ill-formed in the variety. The sentences included the typical kinds of structures that the clinicians might encounter in making judgments about the linguistic well-formedness of the vernacular-speaking population they serve, in this instance African American Vernacular English (AAVE) speakers. The sentences used in the survey are reproduced below, along with the instructions. Sentences showing random choices in the judgments of well-formedness by the clinicians are marked with the symbol @. In other words, the responding clinicians could not determine whether the sentences marked @ were well-formed or ill-formed vernacular structures. For convenience, the correct answers are given below each item, along with a brief explanation of the pattern governing the form.

> Some of the following sentences are well-formed sentences representing vernacular dialects, and others are not. Those that are not well-formed violate some aspect of the vernacular dialect grammatical rule. For each of the sentences, first determine if it is a well-formed vernacular sentence or not. If it is well-formed, write "OK"; if it is NOT well-formed, write "NO", and specify what violation of the rule makes it an ill-formed vernacular sentence.
>
> Examples
> a. She run down the road yesterday

Answer: "Okay"; irregular base form or present used as past tense form
b. The man done tells lies all the time
Answer: "Ill-formed"; done is only used with completed activities, past tense forms.

@1. *The lady be here now.*
[ill-formed; be in AAVE is used in 'distributive/habitual' contexts only]
@2. *The girl goed to the store.*
[ill-formed; regularization of past occurs in a subset of verbs including knowed, growed, throwed, but not with suppletives such as go/went]
@3. *I here today.*
[ill-formed; copula/auxiliary absence occurs with contracted forms of is and are, not with am]
4. *Him and me ain't go to the show.*
[well-formed; ain't generalizes to didn't as well as is/are/am + n't and have+n't forms in AAVE; objective case used with subject coordinates]
5. *She cut sheself.*
[ill-formed; reflexives do not take subject pro + reflexive in AAVE]
@6. *They here last night.*
[ill-formed; copula/auxiliary absence only occurs with present-tense is/are contraction.
@7. *Is I'm late?*
[well-formed; I'm treated variably as allomorph of I, especially in COMP or when followed by empty category (e.g. I'm is)]
8. *Me went to the park.*
[ill-formed; non-coordinate subject uses subjective case pro]
@9. *The toy Daryl.*
[ill-formed; 's must occur with followed by empty category, may be absent when filled (e.g. The toy Daryl toy)]
@10. *The teacher were nice.*
[ill-formed; agreement generalization uses was (note: were may occasionally occur as a hypercorrection)]

For seven of the 10 sample structures of AAVE given in the exercise, the clinicians judgments of well-formedness were essentially random, even though the grammatical patterns of these structures are well-attested in the descriptive literature on this variety. Furthermore, there is ample descriptive evidence that the normal population of AAVE speakers served by the clinicians uses these vernacular grammatical structures. For example, we saw that the response of the clinicians to the grammaticality of 'habitual/distributive' be in sentence (1) above was random. This response pattern clearly contrasts with the grammaticality judgments shown by

a group (N = 35) AAVE speakers representing the population these clinicians serve. This group of 9-11 year old AAVE speakers was asked to select well-formed sentences with be in a forced choice task. The results for AAVE speakers are given in Table 1, where the percentage of correct selection for be in AAVE is given next to the correct item in each sentence pair. All of the responses show non-random distribution for the students.[3]

Table 1. Responses of African American Vernacular English Speakers to 'Habitual be' Sentence Pairs.

	% Correct (N =35)	
1.	91.4	a. ***They usually be tired when they come home.***
		b. They be tired right now.
2.	88.6	a. ***When we play basketball, she be on my team.***
		b. The girl in the picture be my sister.
3.		a. James be coming to school right now.
	88.6	b. ***James always be coming to school.***
4.	68.6	a. ***Wanda be going to school every day.***
		b. Wanda be in school today.
5.		a. My ankle be broken from the fall.
	91.4	b. ***Sometimes my ears be itching.***

The idea of the grammaticality exercise was not to embarrass the clinicians who serve this population of vernacular dialect speakers (in fact, some of these clinicians have now become actively involved in collaborative research related to language variation in this locale), but to show that there is documentable discrepancy in applying available descriptive knowledge about language variation to relevant vernacular linguistic structures.

Such knowledge is not simply sociolinguistic window dressing in speech and language pathology; it may prove to be critical in making judgments about whether or not vernacular speakers' structures are classified as 'normal' or 'disordered'. For example, an AAVE speaker who reveals copula/auxiliary absence involving present tense forms of IS or ARE (e.g. She in the house, You nice) would fall within the norms of well-formedness for AAVE copula/auxiliary use, but a speaker who reveals

copula/auxiliary absence for am (*I here) or for past tense forms (*Yesterday he at school) would indicate non-normative use of these vernacular structures according to local norms of grammatical well-formedness.

A comparable judgment task of well-formedness for Hiberno English, culled from the available descriptive accounts (e.g. Bliss 1984; Henry 1957; Harris 1984a; 1984b; 1991; Milroy and Milroy 1985; Kallen, 1986, 1989, 1990) might take the form of the exercise given below. The well-formedness conditions for the grammatical structures of Hiberno English are, however, offered with the important kinds of qualifications about grammaticalization noted by Kallen (1989, 1990).

> Some of the following sentences are well-formed sentences representing Irish English dialects, and others are not. Those that are not well-formed violate some aspect of vernacular dialect grammatical rule. For each of the sentences, first determine if it is a well-formed vernacular sentence or not. If it is well-formed, write "OK" and identify the rule or structure; if it is NOT well-formed, write "NO", and specify what violation of the rule makes it an ill-formed vernacular sentence.

1. *Them houses is nice, and so is you.*
[ill-formed, is generalizes to plural NPs, but not to pro (Policansky 1982; Harris 1984)]

2. *I know his family all me life.*
[okay, 'extended present', indefinite present anterior uses non-past tense; Harris 1991:203].

3. *He don't be here at the moment.*
[ill-formed, can only use finite be for consuetudinal contexts (Henry 1957; Bliss 1984)

4. *It's badly she'd do it now.*
[okay, clefting may extend to adverbial adjuncts, Predicate Adjective, VPs'etc. (Henry 1957)]

5. *A young man was after getting shot here a long time ago.*
[be after Ving typically occurs with non-past be, favored in 'recency' contexts (Harris 1991:202, but see Kallen 1990)]

6. *Amn't she a nice person?*
[Negative amn't limited to first person singular (Bliss 1984)]

7. *She bes here every day*
[okay, be can be finitized, occurs with habitual activity (Henry 1957; Bliss 1984)]

8. ***She asked if would she do it?***
[ill-formed, indirect questions have Subject Auxiliary Inversion, but do not take COMP if (Bliss 1984:148)].

9. ***He fell and him crossed the bridge.***
[ill-formed, 'subordinating and' occurs with non-finite verb, e.g. 'He fell and him crossing the bridge' (Harris 1984; Filppula 1991)]

10. ***Anyone wasn't any good at all.***
[okay, negative does not have to move leftward from a NEG INFL into indefinite NP (Harris 1984a)]

In the above cases, we limited ourselves to structures that are fairly well attested in the descriptive literature of AAVE and Hiberno English. But there is another level on which the descriptive accounts of community-based vernacular varieties cannot be confined to the extant descriptions offered by social dialectologists. Lectal description must be considered an active, dynamic process that is sensitive to ongoing change and potentially unique lectal variation within a given community. The real challenge of the sociolinguistic model in communication disorders does not simply involve using the descriptive information collected by language variation researchers; instead, it involves the acquisition of an analytical framework that allows clinicians themselves to make patterned observations about language variation on their own. The underlying skill required to collect an appropriate language sample and make observations about language patterning is really a unitary one, whether the skill is applied to the patterning of disorder as in communication disorders, or the patterning of language variation as in linguistics and sociolinguistics (Wolfram and Christian 1989). In this respect, speech and language pathologists in different local settings can actually make important contributions to the descriptive knowledge base of language variation.

To illustrate from a real life situation, let me mention a couple of dialect structures uncovered by speech and language pathologists in a large Northern urban area in the Unites States during the process of a collaborative research effort on the application of sociolinguistic knowledge to speech and language pathology. Some of dialectal structures uncovered involve apparent changes that have taken place in local varieties and others involve previously undescribed sociolinguistic distribution patterns found in the local community. The important point to be made here is that the initial observations about structures were made by the clinicians themselves, who then collected data to confirm or disconfirm various hypotheses about the linguistic patterning or sociolinguistic distribution of items.

One phonological pattern initially observed by the clinicians involves a fronting and centralization of open o in items like dog. In the shift, the pronunciation of dog is moving toward a phonetic merger with the vowel in the name Doug. Various hypotheses about the phonological patterning of the 'near

merger' were offered and data were collected by a subgroup of clinicians to confirm that, in fact, this phonetic shift was restricted to an environment preceding voiced velar segments (that is, items such as dog, fog, frog, log, etc. show this shift, but not walk, talk, long, wrong, etc.). Furthermore, the phonological pattern was found to have a strong ethnic and age correlate in this setting (It was primarily found among younger African American speakers).

On other levels of language, we uncovered several unique shifts of verb subcategorization (e.g. the verb root as __ +NP +PP in She rooted John in line.) along with some semantic shifts of lexical items (e.g. hold used for 'borrow' as in Can I hold a dollar?) that appear to be unique in the younger African American community.

At the same time, clinicians found a quite different sociolinguistic distribution for initial sibilant voicing in the item sink (so that it is homophonous with zinc). While such a pronunciation is well attested in the rural South coastal area of the United States which was the site of origin for much of the African American community in this area, it actually was found to be more saturated among older working-class White speakers who reside in ethnic enclaves apparently inaccessible to these Southern varieties.

Actual observations of community-specific patterns are offered here simply to demonstrate that clinicians need to acquire, and, indeed, are quite capable of utilizing fundamental descriptive-analytical sociolinguistic skills. These observations include details of language patterning as well as profiles of the social and situational variables that correlate with the use of these structures. Clinicians need not concern themselves with providing formal accounts couched in the latest versions of syntactic theory and sociolinguistic explanation; observational adequacy is never completely out of vogue. Ultimately, the application of the sociolinguistic model involves an active, ongoing "research" perspective that can make appropriate observations about language and social variation for the indigenous communities served by practitioners.

Systematic Variation in the Sociolinguistic Model

Perhaps the most fundamental contribution of sociolinguistic studies in language variation over the past twenty-five years is the observation that varieties of language are sometimes differentiated not by the discrete or categorical use or non-use of forms, but by the relative frequency with which different variants of a form may occur (e.g. Labov 1966; Wolfram 1969; Trudgill 1974). For example, in a classic case of fluctuation, [ɪŋ] and [ɪn] variation in the unstressed syllables of items like swimming or fixing, it has been observed that virtually all groups of English speakers vary between the two forms, but that groups of speakers are differentiated on the basis of their relative use of the variants. In other words, all social classes of speakers may apply a nasal fronting process, but simply to differing degrees. For example, in an early study of four social classes of Detroit, Michigan speakers, we

found that upper-middle-class speakers used in' forms in approximately 20 per cent of all cases where they might have used it, lower middle-class in 40 per cent, upper-working in 50 per cent, and lower working class in 80 per cent of these potential contexts for fronting (Shuy, Wolfram, and Riley 1967).

While such variability is inherent within the system of an individual speaker, the relative frequency of items is systematically constrained by two types of effects: (1) social constraints (external constraints), ranging from prototype social demographic factors (Labov 1966) to interactional networks (Milroy 1980) and (2) independent linguistic factors (internal constraints), usually involving structural environment and composition. A classic example showing the operation of both types of constraints is given for the word-final consonant cluster reduction in English, where final stop clusters paired in voicing (that is, both members of the cluster are either voiced or voiceless such as mist, messed, find, or cold vis-a-vis colt, jump, or, runt, which are not paired for voicing). In Table 1, from Wolfram (1991a), we show the mean scores of cluster reduction for groups of speakers from a variety of social and ethnic varieties of English found in the United States. The relevant external factors are social and ethnic group and the relevant internal factors are a following consonant versus non-consonant phonological environment and morphemic boundary (that is monomorphemic forms such as mist versus bimorphemic forms such as missed).

Table 2. Comparison of Consonant Cluster Reduction in Representative Dialects of American English (from Wolfram 1991:199)

LANGUAGE VARIETY	Followed by Cons.		Followed by Vowel	
	Not -ed % Red.	-ed % Red.	Not -ed % Red.	-ed % Red.
Standard English	66	36	12	3
Northern White Working Class	67	23	19	3
Southern White Working Class	56	16	25	10
Appalachian Working Class	74	67	17	5
Northern Black Working Class	97	76	72	34
Southern Black Working Class	88	50	72	36
Chicano Working Class	91	61	66	22
Puerto Rican Working Class	93	78	63	23
Italian Working Class	67	39	14	10
American Indian Puebloan English	98	92	88	81
Vietnamese English	98	93	75	60

The study of systematic fluctuation between items, known as *variation theory*, has become a sociolinguistic staple, showing amazing replicability of at least "more" and "less" relationships for a variety of variable language phenomena.[4] Systematic regularity of this type has been demonstrated for language situations that include

stable and changing dialect relations (e.g. see the figures for Standard English and Working Class Black English in Table 2), interlanguage (e.g. see the figures for Vietnamese English and American Indian Puebloan English in Table 2; also Dickerson 1975; Adamson 1988; Bayley 1991) and first language acquisition (Kovac 1980, Wolfram 1989).

As an example of the range of language situations that show systematic variability, consider its application to variability in the acquisition of final nasal segments for a group of AAVE children (In adult AAVE, final nasal segments may fluctuate with a nasalized vowel so that variation is an inherent part of the adult system as well as the acquisition process). The figures are taken from a longitudinal and cross-sectional study of language acquisition among working-class African American children (Wolfram 1989). The study of final nasal segment acquisition indicates that the variable acquisition of a final nasal segment is systematically affected both by the inherent nature of the segment and the structure of the following phonological environment. In Table 3, figures are given for the presence of three different kinds of nasal segments and several types of following phonological environments for four children at the 36 month age level. Both the raw percentages for nasal absence and the probabalistic figures calculated for two internal factor groups (the type of nasal and the following environment) using the Sankoff-Cedergren VARBRUL (Cedergren and Sankoff 1974) program are given in Table 3.

Table 3. Systematic Variability in Final Nasal Segment Absence, Summary Comparison in Three Environments

	Final Segment		
	m	n	ŋ
Following Environment	% Abs	% Abs	% Abs
__##V	6.7	24.2	0.0
__##Obs	27.3	50.8	33.3
__##Pau	51.2	87.4	53.4

VARBRUL FACTOR PROBABILITIES

Following Environment			**Nasal Segment**		
Pause	Obstruent	Vowel	n	m	ŋ
.826	.466	.195	.739	.363	.383

Goodness-of-fit Chi Square: 3.46

The data indicate that variability in the presence of a nasal segment is systematically constrained by the nature of the nasal segment (*absence* of the segment is favored for coronal nasals over labial and velar nasals, which favor the *presence* of a final segment) and by the canonical shape of the following environment (e.g. a following pause favors the *absence* of a nasal whereas a following vowel favors its *presence*).

Reading (1977), in studying children's variable production in the acquisition of normative /s/ production, also found a number of systematic internal linguistic constraints. For example, the preceding phonological environment showed ordered constraints in which normative /s/ production was favored according to the hierarchy: fricative > stop > nasal. For the following phonological environment the normative production order was: nasal > stop > fricative.

The picture of variability that emerges from an array of situations suggests that systematic constraints on variability are endemic to fluctuation in language. Many dimensions of internal constraints may be explained in terms of universal principles

of naturalness and marking and therefore may derive from a metatheory of optionality; some constraint hierarchies, however, appear to be language-specific, although one may speculate about "parameter-setting" for a general theory of variable phenomena in a way that is analogous to parameter-setting in universal grammar.

How does the variation model developed originally in sociolinguistic studies apply to communication disorders? There are at least two ways in which an understanding of systematic variation should impact the study of communication disorders. One way relates to the interpretation of normative variable behavior and the other to an understanding of change in the remediation process.

Consider, for example, a case in which an understanding of variable behavior is critical to the accurate assessment of variable plural suffix absence in a vernacular dialect of English. Plural suffix absence is a well-established characteristic of several different kinds of vernacular dialects of English, including some varieties that apply this rule fairly generally (e.g. Vernacular Black English as described in Wolfram 1969, Labov 1972) and some that apply this rule to restricted noun subsets (e.g. nouns of weights and measures as described for Hiberno English and Appalachian English in Wolfram and Christian 1976). However, plural suffix absence is an inherently variable phenomenon, especially for those varieties that use the more general version of the rule. The range of plural absence for the general version of the rule typically involves between 10 - 33% of the cases where a plural might potentially be absent (Wolfram 1969; Labov 1972).

Now consider the case of -Z plural absence as represented in a standardized closure test that includes three tokens of regular plural suffixation, the closure portion of the CELF-R (1987). The actual items from the test are given below. The response considered "correct" according to the standardized instructions is given in parentheses and possible vernacular dialect responses based on a categorical model are given in the underlined portion of the item reserved for recording client responses.

1. Here is one dog. Here are two __dog__. (dogs)
   (If the student says *puppies*, indicate this and mark the item as correct.)
2. Here is one cat. Here are two __cat__. (cats)
   (If the student says *kittens*, indicate this and mark the item as correct.)
3. Here is one watch. Here are two __watch__. (watches)

Our understanding of the unimpaired variable nature of plural -Z absence for an AAVE speaker gives us a basis for interpreting the variable responses of an AAVE speaker to the tokens of plurality in the CELF-R. For example, the absence of one of the three tokens of plural -Z suffix might fall within the limits of normalcy for an AAVE speaker (since normal rates of -Z absence range from 10-33 per cent), but the absence of all three instances, or even two absent cases, would not match the normal range of variable -Z absence for this variety. The interpreter of these responses risks

a false positive identification of a speaker if some incidence of -Z absence in the indigenous vernacular is not accommodated in the interpretation of the results. At the same time, the interpreter runs the risk of a false negative interpretation if dialect credit is given for all three instances of plural -Z absence since -Z absence is not categorical in the dialect. Variable linguistic phenomena both differentiate and characterize various varieties of a language, and these dimensions cannot be ignored in interpreting inherently variable linguistic data.

Another application of the variation paradigm relates to understanding systematic variation in relation to language change, whether it be language change over time, normal language acquisition, or the replacement of disordered items with normative variants as a part of the remediation process. As implied in our presentation of systematic variability in first language acquisition and interlanguage, the acquisition of structures does not take place instantaneously, even when the new structures end up being categorical items in the target variety. Instead, new and changing structures go through a period of systematic variation in which the old and the new structures coexist.

The model of language change associated with the variationist paradigm seems quite applicable to the kind of language change that takes place when a client moves from a disordered or delayed variant to a normative variant of language. Following Bailey (1973), we hypothesize that there are a number of stages that change goes through in the ideal movement from the categorical use of one variant to its categorical replacement by another. In between these two points are variable stages that will show systematic constraints related to the "earlier" or "later" stages of the change.[5] This is perhaps best shown by setting up a simple, ideal model of the stages of change, as we have done in Table 4. Table 4 shows the change from the categorical use of one form, X, to another, Y, in two different linguistic environments, E_1 and E_2. Fluctuation between the forms is indicated by X/Y.

Table 4. A Model of Stages in Progression of Change

	E_1	E_2
Stage 1 Earliest Stage, before Undergoing Change	X	X
Stage 2 Early Stage Begins Variably in Restricted Environment	X/Y	X
Stage 3 Change in Full Progress, Greater Use of New Form in Environment Where Change First Initiated	X/Y	X/Y
Stage 4 Change Progresses toward Completion With Movement Toward Categoricality First in Environment Where Change Initiated	Y	X/Y

Stage 5 Completed Change, New Variant Y Y

Although change does always follow the ideal model for a number of reasons (cf. Fasold 1990), the patterned nature of change through variation seems to be sufficiently documented to allow its application to a broadly-based set of language situations, including those of concern within communication disorders. Bailey and others (e.g. Chambers and Trudgill 1980) have even maintained that there is a prototype ***rate*** of change that is associated with the model. As Bailey (1973:77) originally put it:

> A given change begins quite gradually; after reaching a certain point (say twenty per cent), it picks up momentum and proceeds at a much faster rate; and finally tails off slowly before reaching completion. The result is an ∫ curve.

Such a model appears to relate both to regular, systemic change in phonological and syntactic processes/rules and lexically-based diffusion (Chambers and Trudgill 1980:179). While the variation model, including the ***rate of change*** corollary, has not yet been verified empirically in the examination of language remediation, it offers a powerful model for understanding and describing variation and change in communication disorders. And it may even eventually offer a non-arbitrary basis for interpreting "cut-off" points in determining the acquisition of units.[6]

Language Contextualization

Several developing trends in the field of communication disorders point to a growing theoretical and practical concern for the fact that language use is a highly contextualized, socially-embedded process potentially influenced by a wide array of sociolinguistic factors (see Hymes 1974, Preston 1986). One trend inspiring the increased consideration of language contextualization comes from the growing discomfort with the ecological validity of assessment and remediation models that, according to Kovarsky and Crago (1991:44) "fragment language behaviors into discrete, quantifiable components which bear little resemblance to the intricate manner in which language users function in the real world".

Although the field of communication disorders, in past decades, venerated the experimental method and the use of standardized, discrete point language assessment, it has now been forced to confront more broadly-based sociolinguistic issues that challenge prerequisite assumptions about the validity of data restricted to experimental and specialized assessment contexts (Wolfram 1976; Terrell 1983). It has now become essential to consider sociolinguistic contextual issues related to language assessment and remediation for all subjects, but particularly for those subjects who represent linguistically and culturally diverse backgrounds.

There are two primary ways in which context must be factored into the equation of the prototype clinical situation where assessment and remediation traditionally take place. On the one hand, clients bring to the clinical setting a set of socio-cultural experiences that determine how they make sense of the social occasion. For the orderly interpretation of data, subjects must enter into this experimental frame so that the language variables being assessed or manipulated can be tapped in a meaningful way. How subjects "make sense" of such contexts based on their background experiences, however, is a critical sociolinguistic question.

One of the sociolinguistic predicaments that may arise in a clinical setting is the *extraction problem*, in which subjects fail to enter into the experimental frame as constructed by the experimental designer.[6] Instead, subjects apply to the occasion sense-making strategies, including language usage schemes, from their socio-cultural background experiences. For example, in one sociolinguistic study of an experimental testing context, Emihovich (1990) shows how a subset of subjects attempted to give meaning to standardized tape-recorded instructions for a comprehension task by "personalizing" the situation. Consider the following exchange that took place during the introduction of a standardized set of tape-recorded instructions as a subject attempts to situate the instructions. In the transcribed exchange GM is the researcher and TA is a six year old female.

1. GM:	OK
2.	Debbie's gonna talk to you on the tape recorder and tell you about the building she built
3.	And how to make one like hers
4. TA:	Does she have a necklace
5. GM:	No
6.	She doesn't have a necklace?
7.	She's just a-
8. TA:	Is she real?
9. GM:	Oh yeah.
10.	She's a real little girl
11.	She's a real people
12.	And she's gonna tell you how to build a building
13.	And I want you to try and build one just like -
14.TA:	[Does she mean to talk to me?
15.GM:	hers]

(Emihovich 1990:171)

As we can see from the example, the child attempted to ascribe meaning to the situation by placing the tape recorded instructions by "Debbie" in a perspective she could understand, such as wearing shared objects (line 4 TA was also wearing a necklace, questioning whether Debbie existed (line 8), and sharing talk (line 14). The subject thus created an interpretation of the instructions that made sense in terms of

background experience, but not necessarily one that was in line with assumptions of the experimental task.

On the other hand, experimental situations are a kind of speech event in their own right that may call forth a specialized kind of sociolinguistic behavior. This may result in a kind of ***task contextualization***. In our current ethnographic study of the role of vernacular dialects in special education (Adger, Wolfram, and Detwyler 1992) we have uncovered sociolinguistic behavior that can be explained only by appealing to the particularized context of the testing task. For example, consider the following episode that was recorded during the course of a language diagnostic by a speech and language pathologist. In this example, the subject, a 10 year old African American student, was given a stimulus word and then asked to construct a sentence based on the word. In the passage, T indicates the therapist and S indicates the subject, a 10 year old speaker of AAEV.

1	T:	Now I'm going to ask you to, uh, make up some sentences for me and
2		I'm going to write down exactly what you say.
3	S:	Yeah.
4	T:	[Okay], let's practice. Let's say I'm going to ask you to make up a 5
		sentence with the word "books". You might say, "There are many
6		books in this room." Right, okay, I want you to try it, make up a
7		sentence with the word "shoes".
8	S:	I put my shoes on.
9	T:	Very good, now you don't have to use the picture to make your
10		sentence. You can if you want to, you know, if you can't think of
11		something, then just look at the picture, then it can maybe help you
12		think of something to say in your sentence, as long as you have the
13		word that I say.
14	S:	Yeah.
15	T:	Use the word "car" in a sentence.
16	S:	They drove the car.
17	T:	Um huh..."gave".
18	S:	gave?
19	T:	Gave.
20	S:	Gave. They is -- gave, they is, gave, What you say?
21	T:	[right, gave.
22	S:	They is gave in the kitchen.
23	T:	Okay, now not "gravy", did you think I said "gravy"?
24	S:	I said "gave".
25	T:	Okay.

We see in this example that the subject, apparently following the paradigm of the sample item, books (line 5), and the first two test items, shoes (line 8) and cars (line 15,16), uses the stimulus item "gave" as a noun, even though (1) this syntactic formation is quite ungrammatical in her dialect and (2) the subject routinely uses

gave as a past tense form of give as a part of her normal language pattern (This was confirmed by conversation following the test). Her response indicates that pattern pressure from the task frame actually outweighed her grammatical intuitions. The result was a sentence that the subject presumably would not utter during the course of ordinary speech. We conclude that this type of hypercorrection arose as a by-product of the task created by the contextual frame of testing itself. Our ethnographic observation and ethnomethodological probing of responses to test items indicates that the specialized context of the testing occasion can indeed set up a very specialized sociolinguistic context -- a context that needs to be described and understood in its own right if we are to interpret data from such occasions in a reasonable way.

Another trend within communication disorders that has moved the field toward a more broadly-based ethnographic vantage point is the increasing concern with language functions vis-a-vis language form. Under the loosely-defined rubric of "pragmatics", developing concern with speech acts, speech events, conversational routines, and discourse has clearly stretched the limits of the traditional, interactionally-restricted clinical setting. It is now common practice to include in an assessment battery a line of inquiry that can tap representative dimensions of language functions (Gallagher 1991). In this respect, the field of communication disorders appears to have aligned itself more with the division in linguistics which focusses on the empirically-based study of language use rather than cognitively-based organizational principles of universal grammar.[8]

A functionally-oriented perspective has obvious implications for the type of data collected with respect to communication disorders, the procedures used in collecting data, the contexts in which data are collected, and the analytical tools used in analyzing and interpreting data. For example, in many instances, this focus compels clinicians to gather more qualitative types of data as viewed from the vantage point of an ethnographer and to adopt appropriate ethnographic roles vis-a-vis the traditional clinical context. The observational domain for speech and language is thus extended to include a variety of contexts beyond the clinical setting. Furthermore, this viewpoint requires clinicians to consider communication norms and definitions of communicatively disordered behavior in a more community-embedded context (Crago 1988) -- one that is also aware of a client's social networks in the community (Milroy 1980).

A third trend relying on an underlying sociolinguistic perspective relates to the practical issue of "generalization" in remediation. Of the various types of generalization (e.g. paradigmatic and syntagmatic structural transfer) traditionally recognized in the field of communication disorders, the most elusive type has always been so-called *situational transfer*. The disparity between ways of speaking common to the therapy room and the ways of speaking characterizing an array of everyday, ordinary contexts hardly requires exemplification (Rice 1986), but identifying and systematically programming the stages of situational transfer in order

to access the array of real world contexts for language use is essentially a sociolinguistic problem. As such, it calls for a significant understanding of the multifarious dimensions of an ethnography of speaking as a starting point (Kovarsky and Crago 1991). Traditional sociolinguistic dimensions of situation, participants, purposes, genres, and norms for participating in speech events must all be recognized and programmed into the process that moves a person from the speech event of therapy room to ordinary, everyday conversation (Katz 1990).

Sociolinguistic Education and Communication Disorders

In the previous sections, we discussed several sociolinguistic themes that have impacted the field of communication disorders. In some instances, approaches endemic to sociolinguistics are already in place or are currently being implemented, while in other cases the approaches remain programmatic. In this section, we discuss a role for speech and language pathologists that may seem like the most idyllic sociolinguistic entreaty yet made, namely, a proactive educational role for speech and language pathologists with respect to language variation.[9] As we shall see, this role is especially appropriate for clinicians who serve school systems, but it is may also be an appropriate role for those who serve in other settings as well.

Why should specialists in communications disorders become involved in education about language diversity when their defined professional provenance is the diagnosis and remediation of disorders? There are couple of reasons for suggesting this educational role for speech and language pathologists. For one, there is a historic obligation, in that clients representing legitimate dialect divergence have traditionally been referred to speech and language pathologists for "treatment" along with those having genuine language pathologies. Speech and language professionals thus are positioned to play a strategic role in those in institutional settings who remain operationally confused about this distinction. This includes educators, health care professionals, other assessment specialists, and students.

There is also a moralistic reason for this stance that relates to continued tolerance to language discrimination in society. As Milroy and Milroy (1985:3) put it:

> Although public discrimination on the grounds of race, religion, and social class is not now publically acceptable, it appears that discrimination on linguistic grounds *is* publically acceptable, even though linguistic differences may themselves be associated with ethnic, religious and class differences.

Concern for social and educational equity with respect to language differences ought to be a sufficient socio-political motivation for involving speech and language pathologists in the education process about language variation, since the basis for language discrimination ultimately derives from an unjustified set of underlying attitudes and "primitive beliefs" about language differences. If, in fact, one of the primary roles of educational practitioners of all types is to replace misinformation

and ignorance with reliable information and considered reflection, then this charge extends to language as well as other domains of the physical and social sciences. And it stands to reason that language professionals who are knowledgeable about legitimate language differences ought to be responsibly involved in this process.

Furthermore, the ascribed role of the speech and language pathologist as a recognized "language expert" should place clinicians in an position to be heard on language matters. When speech and language pathologists speak about language, people listen. And some educational institutions may be particularly receptive to the sociolinguistic message in light of the current educational attempts to expand language awareness programs (Cheshire, et al. 1989; Cheshire and Edwards 1991; Clark, et al. 1991).

Finally, in many educational settings there is an expanding role for speech and language pathologists in mainstream classroom education (Simon 1987).[10] For example, in the United States it is becoming increasingly common for speech and language pathologists to augment language activities in the mainstream classroom, in addition to their traditional "pull out" therapy sessions with students. Speech and language pathologists are taking a more active and a more collaborative role related to general educational activities involving language. There is no reason why a speech and language pathologists cannot use some of these collaborative educational opportunities to introduce students and professional colleagues to the nature of language variation.

A Proactive Educational Pilot Program

In a recent pilot program in a large Northern urban area in the United States, Wolfram, Detwyler, and Adger (1992) experimented with a curriculum on language variation for 4th and 5th grade level students.[11] The goal of the specialized curriculum includes humanistic, scientific, and cultural objectives. On a humanistic level, the objective is simply to introduce students to the natural and normal range of dialect differentiation embedded in various cultural traditions within society. Students are introduced to elementary notions of language variation as they are contrasted with some of the typical types of prejudices and stereotypes associated with dialect differentiation in popular culture. For example, through selected vignettes from a popular video, American Tongues (1986), students are inductively introduced to the naturalness of culturally-based and regionally-based linguistic diversity. These natural reflections of linguistic diversity are then contrasted with a set of excerpts (taken from real life interviews about language attitudes) in which people resort to unjustified stereotypes in describing other people's speech.[12]

After student-led, small group discussions of the video presentation, students were asked to write their impressions to the portrayal of dialect diversity. Out of 27 essays written by the students in one classroom, 21 included unsolicited comments about the unfairness of some of attitudes depicted in the interviews with people

about dialect diversity. The following comments (reported in full) are representative of the students' comments after the presentation and discussion:

> Today I learned that not all people speak the same. I liked the way some people talk differently. I did not like the way some people teased others because of their language. I would like to see Dr. Wolfram improve the attitudes of the people in the video.
>
> I like how some people talked on the video. I did not like how some people talked about other people saying that their language was crazy. Dr. Wolfram has a weird name. What country was his ancestor from. He is very funny. I hope I learn more about dialects.

Although much of the presentation about dialect diversity is quite inductive, it is clear that the students understood (1) that it is natural and normal for people to speak different dialects and (2) that many popular attitudes and stereotypes about dialect differences are unjustified. This is an initial step in promoting the truth about dialects, but, unfortunately, it is a necessary starting point.

Another goal of the curriculum is scientific, in the sense that the students examine patterns of language variation as kind of scientific inquiry. Dialect differences can provide a natural laboratory for making generalizations drawn from carefully described sets of data. For example, exercises about dialects can be used to engage students in learning about the patterning of dialects at the same time they afford students the opportunity to engage in a type of scientific reasoning. Consider one example of a student exercise on the merger of the [I]/[E] contrast before nasal segments, as this process operates in Southern varieties of English in the United States. First the students are presented data indicating where the merger takes place, followed by another set of data showing where the merger does not take place. Based on these data, students are then asked to formulate an hypothesis that specifies the phonological environment triggering the merger. Finally, they are asked to predict where the merger does and does not occur for a new set of data.

A SOUTHERN VOWEL PRONUNCIATION

In some Southern dialects of English, words like ***pin*** and ***pen*** are pronounced the same. Usually, both words are pronounced as ***pin***. This pattern of pronunciation is also found in other words. List A has words where the *i* and *e* are pronounced the SAME in these dialects.

LIST A: *I* and *E* Pronounced the Same

1. tin and ten
2. kin and Ken
3. Lin and Len
4. windy and Wendy
5. sinned and send

Although *i* and *e* words in List A are pronounced the SAME, there are other words where *i* and *e* are pronounced differently. List B has word pairs where the vowels are pronounced DIFFERENTLY.

LIST B: *I* and *E* Pronounced Differently

1. lit and let
2. pick and peck
3. pig and peg
4. rip and rep
5. litter and letter

Compare the word pairs in LIST A with the word pairs in LIST B. Is there a pattern that can explain why the words in List A are pronounced the SAME and why the words in List B are pronounced DIFFERENTLY? To answer this question, you have to look at the sounds that are next to the vowels. Look at the sounds that come after the vowel. What sound is found next to the vowel in all of the examples given in List A?

Use your knowledge of the pronunciation pattern to pick the word pairs in List C that are pronounced the SAME (S) and those that are pronounced DIFFERENTLY (D)in this Southern dialect.

LIST C: Same or Different?

__ 1. bit and bet
__ 2. pit and pet
__ 3. bin and Ben

__ 4. Nick and neck
__ 5. din and den

How can you tell where *i* and *e* will be pronounced the same and where they will be pronounced differently?

Exercises of this type require students to examine data depicting regional and ethnic language variation, to formulate hypotheses about systematic language patterning, and then to confirm or reject hypotheses about the patterning. Simultaneously, and inductively, students learn about the scientific method in the study of the language as they understand the regular, predictable nature of language variation. As a by-product of this type of inquiry, we have found that students and teachers begin to develop a non-patronizing respect for the intricacy of language patterning in dialects (including other people's and their own dialects) regardless of the social status of the respective varieties.

A third major goal of the curriculum is cultural-historical. Students are exposed to the historical development of representative varieties (typically, the ones commonly used by the students) so that they can develop a sense of appreciation for the ancestral cultures and circumstances that have brought about the formation of these varieties. Students in this curriculum are introduced to the historical development of AAVE from its presumed creole roots through concrete, participatory activities as well as well as historical exposition. Thus, in one group activity students make up a skit simulating language contact between groups that speak unintelligible languages. In this way, they inductively learn to appreciate the circumstances that give rise to language pidginization. Following the skit, they view a video segment profiling the development, distribution, and migration of pidgins and creoles in the African diaspora to see the historical continuity between AAVE (assumed to be a decreolized variety), Caribbean, and West African-based creoles. Through this process, students gain an appreciation for the roots of different sociolinguistic groups, replacing myths about language change and development with authentic socio-historical information.

This type of education in language diversity serves to connect minority students with their own sociolinguistic heritage in a positive, empowering way (Cummins 1986). Students who acquire sociolinguistic awareness certainly stand to profit from such an educational experience whether or not they are in need of the specialized services of communication disorders specialists. And we have found that vernacular dialect students being treated for communication disorders (i.e. authentic disorders in terms of community-based norms) seem to particularly receptive to such a perspective.

Communication disorders specialists who contribute to sociolinguistic education in a meaningful way should find that their potential service to their clients, to the educational system, and to society at large can be much more inclusive than

they ever imagined. The challenge to acquire, apply, and disseminate reliable information and valid perspectives about language variation throughout society and the schools can hardly be confined to traditional educational roles and practices. In this regard, speech and language pathologists seem to have an unprecedented socio-educational opportunity, if not an incumbent obligation.

Footnotes

1. As seen in Lahey (1990, 1992) and Seymour (1992), the issue of adapting language norms for "linguistically divergent" groups is hardly a settled issue on a theoretical or practical level.

2. Admittedly, the concept of the ***speech community*** is not always easy to define theoretically or operationally. The most practical definition, however, seems to one tied in strongly with local social networks (e.g. Milroy 1980) rather than one based on broadly-based values and large-scale categories such as territory or social class (e.g. Labov 1966). However, as Milroy (1992) observes, these notions are not necessarily mutually exclusive.

3. The application of a Chi Square test for student responses shows $p > .01$ for all five sentence pairs given to the students.

4. Although variation theory has flourished in sociolinguistics, it has never been generally accepted in mainstream linguistics, for reasons that range from its alleged status as a trivial type of performance theory to an uncertainty as to how structured variation might fit into current theories of language structure (cf. Fasold 1991; Wolfram 1991b). This is an intriguing issue but beyond the scope of our presentation here.

5. There is also evidence that both internal and external constraints will enter the equation of systematic language change, given the fact that social factors invariably co-vary with language variation. As Labov (1972b) and Milroy (1992) have shown, the social mechanisms of language change cannot be ignored in accounting for the process of change. For language change involving the acquisition of normative structures in language remediation, a set of external factors must also be considered; although the identity and configuration of social factors might be somewhat different from the set of social factors affecting other types of language change (e.g. social context may involve therapy versus various situations outside of therapy, or interlocutors may include a different set of individuals such as therapist, teacher, parent, and peer).

6. Cut-off points for determining normal phonological acquisition on the basis of variable data have been an interpretation problem for many years now. Aritrary points for normative behavior typically range from a 50 to 90+ per cent level for normative productions, but these levels have typically been chosen without regard to the actual patterning of variable behavior in the process of change.

7. What I call the "extraction problem" is obviously related to what others have called "field dependence" and "field independence" (cf. Bernstein 1981), but I prefer to avoid discussing the sociolinguistic implications of these notions in this paper.

8. It appears to me that linguistics is currently heading toward and irreconcilable division into "cognitive" and "behavioral" linguistics. The cognitive branch is concerned with a set of abstract principles accounting for the LANGUAGE capacity of the human mind, whereas the behavioral branch remains committed to extracting from the direct observation of language behavior. The goals, the definition of data, and the methods of argumentation in these two camps are intrinsically quite disparate and, in many ways, seem irreconcilable. (cf. Fasold 1986).

9. The role outlined here certainly dovetails with more broadly based educational themes of so-called Language Awareness programs in the United Kingdom (cf. Hawkins 1984, 1985, but also see the types of controversy surrounding the program as discussed, for example, by Clark, et al 1990). The goals of the proactive role for speech and language pathologists specified in this presentation seem more concretely focussed and manageable than some of the extant Language Awareness programs described in the literature.

10. Part of the movement of speech and language pathologists into the mainstream classroom coincides with the integration of students with special education needs into the mainstream classrooms. However, there is a justification for this expanded role of clinicians apart from the "mainstreaming" movement.

11. The curriculum was piloted in three different types of urban classrooms, one a regular classroom, one a special all-boys classroom that included a majority of students who were receiving special education services, and one an "advanced placement" classroom.

12. The style in which people often comment about language in this video, which was compiled from actual interviews with people about dialects, is reminiscent of the stereotyping style popularized in the American TV series "Archie Bunker".

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